



VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
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(804) 698-4000

James J. Golden
Regional Director

May 31, 2019

Mr. Jerry Byerly
Director
Hopewell Water Renewal
P.O. Box 969
Hopewell, VA 23860

Location: City of Hopewell
Registration No.: 50735

Dear Mr. Byerly:

Attached is a renewal Title V permit to operate your facility pursuant to 9 VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit incorporates provisions from the Title V permit dated October 2, 2014. The attached permit will be in effect beginning October 1, 2019.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on November 8, 2018 and solicited written public comments by placing a newspaper advertisement in The Progress-Index on April 17, 2019. The thirty-day comment period, provided for in 9 VAC5-80-270, expired on May 20, 2019.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all conditions carefully.

This permit approval to operate does not relieve Hopewell Water Renewal of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code at 9 VAC 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

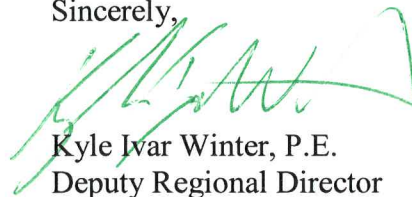
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5020.

Sincerely,



Kyle Ivar Winter, P.E.
Deputy Regional Director

Attachment: Permit

cc: Chief, Permits and Technical Assessment Branch (3AP11), U.S. EPA, Region III
David Robinett, Manager/Brenda Eggleston, Inspector, Air Compliance



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Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee/Facility Name:	Hopewell Water Renewal
Facility Location:	231 Hummel Ross Road Hopewell, Virginia
Registration Number:	50735
Permit Number:	PRO50735

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 2 through 29)

October 1, 2019
Effective Date

September 30, 2024
Expiration Date


Deputy Regional Director

31 May 19
Signature Date

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Facility Information

Permittee

Hopewell Water Renewal
P.O. Box 969
Hopewell, VA 23860

Responsible Official

Jerry Byerly
Director

Facility

Hopewell Water Renewal
231 Hummel Ross Road
Hopewell, VA 23860

Contact Person

Richard "Dickie" L. Thompson, Jr.
Deputy Director
(804) 541-2214, ext. 208

County-Plant Identification Number: 51-670-0053

Facility Description: NAICS 221320 - The facility is a publicly owned treatment works (POTW) that treats domestic and industrial wastewater. The facility has a design flow rate capacity of 50 million gallons per day (MGD) and currently treats an average influent flow rate of 25-30 million gallons of wastewater per day. The treatment processes consist of wet stream treatment units and solids handling facilities. Raw wastewater is processed by preliminary* and primary* treatment units and then biologically treated by secondary treatment units. This treatment results in the generation of sludges that are thickened, mechanically dewatered, and thermally oxidized in a multiple hearth furnace. The multiple hearth furnace will have an alternative operating mode (or standby mode) of combusting auxiliary fuel only (natural gas and/or propane). The treated wastewater is discharged into Gravelly Run, which flows into the James River.

* The domestic influent and the industrial influent have separate influent screens, grit chambers, Parshall flumes, and primary clarifiers.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Biosolids/Sludge Incinerator							
13a	S5	Multiple Hearth Furnace (MFG date: 1974) – Main Operating Mode Minimum Chamber Temp. (°F) : 100-1,200 (for hearths #1-#8)	Incinerator max. rated cap.: 6,500 lbs/hr (dry biosolids/sludge @ 30% solids) Burner rated capacity: 40.2×10^6 (sludge & auxiliary fuel: natural gas) BTU/hr	Hitachi Zosen Inova Multi-Stage Scrubber System	S5-1	VOC/HAPs, PM	12/2/74 (amended 12/10/74)
13b	S6	Multiple Hearth Furnace (MFG date: 1974) – Standby Mode	Burner rated capacity: 40.2×10^6 (auxiliary fuel: natural gas) BTU/hr	-	-	-	12/2/74 (amended 12/10/74)
Stationary Combustion Engines							
22		Diesel-fired Kohler 300 RE0ZV emergency generator (MFG date: March 2006)	300 kW	-	-	-	-
23		Diesel-fired Caterpillar C15 emergency generator (MFG date: November 2015)	500 kW	-	-	-	-

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Wastewater							
2	S1	Grit Chambers (three units)	50 million gallons of wastewater per day plant	Aluminum cover and vent ¹	-	VOC/HAPs	12/2/74 (amended 12/10/74) and 5/30/96 RACT
3	S1	Parshall Flume (one unit)		Aluminum cover and vent	-	VOC/HAPs	12/2/74 (amended 12/10/74) and 5/30/96 RACT
4	Fug.	Supernatant Return Discharge (one unit)		-	-	-	12/2/74 (amended 12/10/74)
5a	Fug.	Industrial Primary Clarifiers (four units)		-	-	-	12/2/74 (amended 12/10/74)
5b	Fug.	Domestic Primary Clarifiers (three units)					
5c	Fug.	Denitrification unit (one unit)					
6	S2	UNOX System (four trains)		-	-	-	12/2/74 (amended 12/10/74)
7	Fug.	Secondary Clarifiers (eight units)		-	-	-	12/2/74 (amended 12/10/74)

¹Only the Grit Chamber weirs and a small portion of the Grit Chamber channels located directly upstream of the Grit Chamber Weirs are covered.

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
11	S3	Sludge Holding Tanks (two tanks)		-	-	-	12/2/74 (amended 12/10/74)
12	S3/S4	Sharples Centrifuges (three units)		-	-	-	-
102	Fug.	Ash Handling System	1,800 lbs/hr	-	-	-	-
112		Domestic Influent Screens (three units)	37.2 million gallons of wastewater per day				02/24/15
113		Domestic Grit Tanks (2 tanks)					02/24/15
114		Domestic Parshall Flume (1 unit)					02/24/15
115		Domestic Distribution Box (1 unit)					02/24/15
116		Domestic Primary Clarifiers (3 units)					02/24/15
117		MBBR System (5 tanks)					02/24/15
118		Domestic DAF Units (3 units)					02/24/15
119		Chlorine Contact Tanks (2 tanks)					02/24/15

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Multiple Hearth Furnace Equipment Requirements - (emission unit ID#s 13a (Main Operating Mode) and 13b (Standby Mode))

1. Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) -

Limitations - Emissions from the operation of the Multiple Hearth Furnace shall not exceed the limit specified below:

Particulate Matter 0.65 grams/kilogram of dry sludge incinerated

(9 VAC 5-80-110 and 40 CFR 60.152(a)(1), NSPS Subpart O)

2. Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) -

Limitations - Emissions from the operation of the Multiple Hearth Furnace shall not exceed the limit specified below:

Particulate Matter 0.14 grains/dscf, corrected to 12% CO₂*

* Without the contribution of auxiliary fuel.

(9 VAC 5-80-110 and 9 VAC 5-40-750)

3. Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) -

Limitations - Emissions from the operation of the Multiple Hearth Furnace shall not exceed the limit specified below:

Mercury 3,200 grams/24-hour period

(9 VAC 5-80-110 and 40 CFR 61.50, Mercury NESHAP, Subpart E)

4. Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) -

Limitations - Visible Emissions from either of the Multiple Hearth Furnace stacks (main operating mode/stack S-5 or standby mode/stack S-6) shall not exceed 20 percent opacity, except for one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity (standby mode/stack S-6 only).

(9 VAC 5-80-110, 9 VAC 5-50-80 and 40 CFR 60.152(a)(2), NSPS Subpart O)

5. Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) -

Monitoring – The permittee shall obtain representative samples of the sludge feed to the Multiple Hearth Furnace and analyze these samples for mercury content once each calendar year. The permittee shall use the data so obtained together with the sludge feed rate data acquired in accordance with Condition 6 to determine compliance with the mercury emission standard in Condition 3. Records of the sludge sampling results, compliance determinations, and the details of any corrective actions shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

6. **Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) - Monitoring** – The permittee shall install, calibrate, maintain, and operate continuous monitors for the following Multiple Hearth Furnace operating parameters:

- the mass or volume of sludge charged;
- the oxygen content of the incinerator exhaust gas;
- the pressure drop of the gas flow through the scrubber system;
- the temperature at each hearth; and
- the total supplemental fuel flow.

The accuracy, location, and calibration frequency for each of the above devices shall be as specified in 40 CFR 60.153.

(9 VAC 5-80-110 and 40 CFR 60.153(a and b (1-4)))

7. **Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) - Monitoring** – For each day in which the Multiple Hearth Furnace is fed sludge, the permittee shall collect and analyze a grab sample of the sludge fed to the Multiple Hearth Furnace once per day. The dry sludge content and the volatile solids content of each sample shall be determined in accordance with 40 CFR 60.153(b)(5). As an alternative to the test method required by 40 CFR 60.153(b)(5) which refers to a test method from an out of publication edition of Standard Methods (16th Edition), the permittee may use a valid test method based on a more current edition of Standard Methods.
(9 VAC 5-80-110 and 40 CFR 60.153(b)(5))

8. **Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) - Monitoring** – The permittee shall observe the Multiple Hearth Furnace stack for at least one minute on one day within the first seven operating days of each month. If visible emissions are noted, the permittee shall take immediate and appropriate action to correct the cause of the opacity. If such corrective action fails to correct the visible emissions, a visible emissions evaluation (VEE) shall be conducted for at least six minutes in accordance with 40 CFR 60, Appendix A Method 9. If the VEE average for the six minute period exceeds ten percent, the VEE shall continue for one hour from initiation. All periodic visual evaluations, visible emission evaluations, and corrective actions necessary shall be recorded in a logbook. The logbook shall be kept at the facility and be made available for inspection by the DEQ for the most recent five year period.
(9 VAC 5-80-110)

9. **Multiple Hearth Furnace Equipment Requirements - (emission unit ID #13) - Recordkeeping** – The permittee shall retain records of the data recorded by the continuous monitors of Condition 6 and obtained from the grab samples of Condition 7 as well as the details of any corrective action taken in accordance with Condition 10.c.vii. of this section for a minimum of five years.
(9 VAC 5-80-110 and 40 CFR 60.153(c))

10. Multiple Hearth Furnace Equipment Requirements - (emission unit ID# 13) - Reporting

- The permittee shall submit semi-annual reports containing the following information:

- a. A record of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than, by the percentage specified in 40 CFR 60.155(a)(1)(ii), the average scrubber pressure drop measured during the most recent performance test; and
- b. A record of average oxygen content in the multiple hearth furnace exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the most recent performance test by more than 3 percent;
- c. For each calendar day in which a decrease in scrubber pressure drop or increase in oxygen content of exhaust gas (as indicated in a. or b. of this condition) is reported:
 - i. The scrubber pressure drop averaged over each 1-hour incinerator operating period;
 - ii. The multiple hearth furnace exhaust oxygen content averaged over each 1-hour incinerator operating period;
 - iii. The temperature of every hearth averaged over each 1-hour incinerator operating period;
 - iv. The rate of sludge charged to the multiple hearth furnace averaged over each 1-hour incinerator operating period;
 - v. The multiple hearth furnace fuel use averaged over each 8-hour operating period;
 - vi. The moisture and volatile solids content of the daily grab sample of sludge charged to the multiple hearth furnace; and
 - vii. The details of any corrective action taken by the source to address any operating parameter deviation referenced in a. and b. of this condition.

The above reporting provisions shall apply only during periods of sludge incineration and do not apply during transitional periods of unit start-up/shutdown and sludge burnout.
(9 VAC 5-80-110 and 40 CFR 60.155(a-b))

11. Multiple Hearth Furnace Equipment Requirements - (emission unit ID# 13) - Reporting

- The permittee shall report the results of any 40 CFR Part 60, Appendix A Method 9 opacity test performed as a result of Condition 8 if the test indicates the facility is out of compliance with the standard contained in Condition 4. The reports shall meet all the requirements of General Condition 65 of this permit.

(9 VAC 5-80-110)

12. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) - Limitations** – The Multiple Hearth Furnace and associated ash handling system shall not cause or permit to be discharged into the atmosphere emissions in excess of that allowed under the provisions of 40 CFR 60.5165.
(9 VAC 5-80-110 and 9 VAC 5-40-8220)
13. **Ash Handling System Requirements - (emission unit ID# 102) - Limitations** – The permittee shall not cause or permit to be discharged into the atmosphere from any ash conveying system (including conveyor transfer points) any visible emissions for more than 5% of hourly observation period, measured at three, 1-hour observation periods.
(9 VAC 5-80-110 and 9 VAC 5-40-8240 B)
14. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Operator Training and Certification Requirements** - The provisions of 40 CFR 60.5130, 40 CFR 60.5135, 40 CFR 60.5140, 40 CFR 60.5145, 40 CFR 60.5150, 40 CFR 60.5155, and 40 CFR 60.5160 apply.
(9 VAC 5-80-110 and 9 VAC 5-40-8270)
15. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Compliance Schedule Requirements** – The Multiple Hearth Furnace and ash handling system shall comply with “Emission Standards for Sewage Sludge Incineration Units” (Rule 4-55).
(9 VAC 5-80-110 and 9 VAC 5-40-8280)
16. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Compliance Schedule Requirements** – The provisions of 40 CFR 60.5085, 40 CFR 60.5090, 40 CFR 60.5095, 40 CFR 60.5100, 40 CFR 60.5105, 40 CFR 60.5110, 40 CFR 60.5115, 40 CFR 60.5120, and 40 CFR 60.5125 apply.
(9 VAC 5-80-110 and 9 VAC 5-40-8280)
17. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Operating Requirements** - The Multiple Hearth Furnace and ash handling system shall not be operated in a manner that does not comply with the provisions of 40 CFR 60.5170 and 40 CFR 60.5175.
(9 VAC 5-80-110 and 9 VAC 5-40-8290)
18. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Compliance Requirements** – With regard to the emission limits in 9 VAC 5-40-8220, 9 VAC 5-40-8240 B and 9 VAC 5-40-8290, the following provisions apply:
 - a. 9 VAC 5-40-20 B, C, D, and E;
 - b. To the extent specified in the federal regulations cited in Condition 18c, 40 CFR 60.7, 40 CFR 60.8, 40 CFR 60.11, and 40 CFR 60.13; and

- c. 40 CFR 60.5185, 40 CFR 60.5190, 40 CFR 60.5195, 40 CFR 60.5200, 40 CFR 60.5205, 40 CFR 60.5210 and 40 CFR 60.5215.

(9 VAC 5-80-110 and 9 VAC 5-40-8300)

19. **Ash Handling System Requirements - (emission unit ID# 102) - Monitoring** – The ash handling system shall be observed for a 15 minute period each week in which ash is being conveyed to determine if the ash conveying system and any associated transfer points have any visible emissions. If any visible emissions are noted, the permittee shall take immediate and appropriate action to correct the cause of the visible emissions. If such corrective action fails to correct the visible emissions, a visible emissions evaluation shall be conducted for three one-hour periods in accordance with 40 CFR 60, Appendix A Method 22. All periodic visual observations and corrective actions taken shall be recorded. The permittee shall maintain records of the results of the weekly visible emissions observations, any Method 22 visible emissions evaluations, and the details of any corrective actions taken as a result of the visible emissions observations.

(9 VAC 5-80-110 and 9 VAC 5-40-8240 B)

20. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID# 13 and 102) – Recordkeeping and Reporting** – With regard to the emission limits in 9 VAC 5-40-8220, 9 VAC 5-40-8240 B and 9 VAC 5-40-8290, the following provisions apply:

- a. 9 VAC 5-40-50 F and H;
- b. 40 CFR 60.7; and
- c. 40 CFR 60.5230 and 40 CFR 60.5235.

(9 VAC 5-80-110 and 9 VAC 5-40-8320 B)

21. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID# 13 and 102) – Recordkeeping and Reporting** – With regard to the emission limits in 9 VAC 5-40-8220, 9 VAC 5-40-8240 B and 9 VAC 5-40-8290, the following provisions apply:

- a. 9 VAC 5-20-180 with the exception of subsections E, F, and G; and
- b. 40 CFR 60.5180 and 40 CFR 60.5181.

(9 VAC 5-80-110 and 9 VAC 5-40-8340 B)

22. **Multiple Hearth Furnace Equipment and Ash Handling System Requirements - (emission unit ID#s 13 and 102) – Performance Testing, Monitoring, and Calibration Requirements** – With regard to the emission limits in 9 VAC 5-40-8220, 9 VAC 5-40-8240 B and 9 VAC 5-40-8290, the following provisions apply:

- a. 9 VAC 5-40-30 D and G;
- b. 9 VAC 5-40-40 A and F;

- c. 40 CFR 60.8(b) through (f), with the exception of paragraph (a);
- d. 40 CFR 60.13; and
- e. 40 CFR 60.5220 and 40 CFR 60.5225.

(9 VAC 5-80-110 and 9 VAC 5-40-8310)

Grit Chambers/Parshall Flume Process Equipment Requirements - (emission unit ID #2-3)

- 23. Grit Chambers/Parshall Flume Process Equipment Requirements - (emission unit ID #2-3) - Limitations** – Volatile Organic Compound emissions from the three Grit Chambers and the Parshall Flume shall be controlled by a cover and vent.

(Note: Only the Grit Chamber weirs and a small portion of the Grit Chamber channels located directly upstream of the Grit Chamber are covered.)

(9 VAC 5-80-110, 9 VAC 5-40-300 and Condition E.2 of 5/30/96 RACT Consent Order)

- 24. Grit Chambers/Parshall Flume Process Equipment Requirements - (emission unit ID #2-3) - Monitoring** – An annual internal inspection shall be conducted on the cover and vent controlling VOC emissions from the grit chambers and Parshall Flume. The permittee shall maintain records of the results of the annual structural integrity inspections of the cover and vent and details of any corrective actions taken as a result of these inspections. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

UNOX System Process Equipment Requirements - (emission unit ID #6)

- 25. UNOX System Process Equipment Requirements - (emission unit ID #6) - Limitations** – The permittee shall accept any wastewater containing pulping process condensates regulated under 40 CFR 63, Subpart S, below the liquid surface of the UNOX System.

(9 VAC 5-80-110 and 40 CFR 63.446(e)(2))

- 26. UNOX System Process Equipment Requirements - (emission unit ID #6) - Limitations** – The permittee shall operate the UNOX System to reduce and to destroy the affected Hazardous Air Pollutants (HAPs) present in the regulated wastewater (as defined in Condition 25) by at least 92 percent by weight.

(9 VAC 5-80-110 and 40 CFR 63.446(e)(2-3))

- 27. UNOX System Process Equipment Requirements - (emission unit ID #6) - Limitations** – As stated in 40 CFR 63.1583(c), if the POTW treatment plant accepts one or more specific regulated industrial waste streams as part of compliance with one or more other NESHAP, then the facility is subject to all the requirements of each appropriate NESHAP for each waste stream. The permittee shall notify EPA and DEQ at least 165 days for new

applications, and 75 days for amended applications, prior to accepting any new wastewater stream subject to treatment requirements under the POTW MACT or other NESHAP.

(Note: The use of the phrase "waste streams" in 40 CFR 63.1583, and in this condition, is understood to mean "wastewater streams.")

(9 VAC 5-80-110 and 40 CFR 63.1583)

28. UNOX System Process Equipment Requirements - (emission unit ID #6) - Limitations –

Any Group 1 wastewater stream that is introduced to the treatment plant at a point prior to (upstream of) the UNOX system shall be handled in accordance with 40 CFR 63.132 (if applicable) and/or any other applicable requirement as established pursuant to 40 CFR 63.1583 prior to its introduction to the UNOX System.

(9 VAC 5-80-110 and 40 CFR 63.1583)

29. UNOX System Process Equipment Requirements - (emission unit ID #6) - Limitations –

The permittee shall operate the UNOX System in compliance with the site-specific operating parameters, monitoring parameters, and corresponding values indicated in Tables 1 and 2 shown below:

TABLE 1 – UNOX Operating System Parameters

Parameter	Value
Oxygen Supply Flow Rate (tons per day)	≥ 65 TPD
Aerator Horsepower	≥ 900 total aerator horsepower; Minimum 225 aerator horsepower per train in service
Condensate Influent Flow Rate (million gallons per day, MGD)	≤ 1.0 MGD
Total Wastewater Influent Flow Rate (MGD)	≤ 50 MGD

If any of the UNOX System Operating Parameters (daily, 24-hour basis) are outside of the values listed in Table 1, the permittee shall record the date of such occurrence and comply with the procedures set forth in Condition 32.

TABLE 2 – UNOX System Monitoring Parameters

Parameter	Value	Monitoring Method and Location
Soluble Chemical Oxygen Demand (sCOD) (mg/l)	≤ 223	Daily 24-hour composite sample of the liquid effluent from the secondary clarifier
Lower Explosive Limit (LEL)	≤ 25%	Continuous instantaneous reading by explosivity meter installed in the UNOX basin.
UNOX System Vent Gas Purity (VGP) (% O ₂)	≤ 52%	Daily average of continuous readings of the UNOX System

If the facility exceeds (a) the LEL value in multiple in-service trains, or (b) both the Vent Gas Purity and sCOD values in Table 2, or (c) the Vent Gas Purity is greater than 96%, then the permittee shall record the date of the occurrence and comply with the procedures set forth in Condition 32.

The permittee shall operate the UNOX System in compliance with the operating and monitoring parameter values indicated in Table 1 and Table 2 unless a revised site-specific alternative monitoring plan is approved by the United States Environmental Protection Agency.

(9 VAC 5-80-110 and 40 CFR 63.453(j) and (o))

30. UNOX System Process Equipment Requirements - (emission unit ID #6) - Monitoring –

The permittee shall install, operate, and maintain continuous monitoring devices, as appropriate for the UNOX System operating and monitoring parameters indicated in Table 1 or Table 2 of Condition 29. The permittee shall submit periodic performance reports for the continuous monitoring system (CMS) relative to the above parameters. These CMS performance reports are to be provided as part of the semiannual reports specified in General Condition 63.

(9 VAC 5-80-110 and 40 CFR 63.453(n))

31. UNOX System Process Equipment Requirements - (emission unit ID# 6) - Monitoring –

For all days in which monitoring data for one or more designated monitoring parameters is unavailable for greater than 25 percent of the day (greater than 6 hours), the permittee shall conduct a performance test for percent HAP reduction using the test procedures of 40 CFR 63.457(l). Since the permittee has the ability to monitor certain operating parameters by alternate methods during periods when a primary monitoring device is malfunctioning or not functional, performance testing for percent HAP reduction is not required for periods when valid monitoring parameter data is available from alternate methods. DEQ reserves the right to determine if the alternate method is valid for determining compliance during periods when a primary monitoring device is malfunctioning or not functional.

(9 VAC 5-80-110, 40 CFR 63 Subpart S and 9 VAC 5-60-100)

32. UNOX System Process Equipment Requirements - (emission unit ID# 6) –

Monitoring/Testing – The permittee shall perform the following actions when the operating or monitoring parameters specified in Condition 29 are below the minimum, or above the maximum (as appropriate) operating parameter values established in Condition 29 (an operating or monitoring parameter excursion). These actions shall be met as soon as practical after the establishment of any operating or monitoring parameter excursion:

- a. Perform a performance test for percent HAP reduction using the test procedures of 40 CFR 63.457(l) and the daily inlet and outlet samples of regulated wastewater that coincide with the parameter excursion. These samples shall be obtained prior to the actions required by Condition 32b. and c.

- b. Take steps to repair or adjust the operation of the process to end the parameter excursion period.
- c. Take steps to minimize total HAP emissions to the atmosphere during the parameter excursion period.
- d. Notify DEQ if the results from the performance test indicate a violation of the percent HAP reduction standard.
- e. The results of performance test required by Condition 32a. and the procedures specified in 40 CFR 63.453(p)(2) shall be used to determine compliance with Condition 26 for the monitoring parameter excursion period.

(9 VAC 5-80-110, 40 CFR 63.453(p) and 9 VAC 5-60-100)

33. **UNOX System Process Equipment Requirements - (emission unit ID #6) – Testing** – The permittee shall obtain daily inlet and outlet samples of regulated wastewater. Samples shall be stored as described in 40 CFR 63.457(n).
(9 VAC 5-80-110 and 40 CFR 63.457)

34. **UNOX System Process Equipment Requirements - (emission unit ID# 6) - Testing** – The permittee shall perform quarterly percent reduction tests on the UNOX System when receiving regulated wastewater. These percent reduction tests shall be performed as specified in 40 CFR 63.457(l) within 45 days after the beginning of each quarter. The first quarter tests for each year shall include measurement of methanol and non-methanol HAP mass in the regulated wastewater stream (condensate stream) to determine the ratio of non-methanol HAP mass to methanol mass (“r” value). For demonstrating compliance with the 92 percent standard, the “r” value from the first quarterly performance test each year will be used for the subsequent quarterly performance tests through the remainder of that year. Parameter values (for those parameters listed Condition 29 of this permit) shall be measured during the quarterly performance tests. Quarterly test reports are to be provided by DEQ within 60 days of the test results becoming available from the contracted analytical laboratory.
(9 VAC 5-80-110, 40 CFR 63.453)

35. **UNOX System Process Equipment Requirements - (emission unit ID# 6) - Recordkeeping** – The permittee shall retain records of emission data and operating parameters required to demonstrate compliance with Conditions 29-34 of this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Daily records of UNOX System operating and monitoring parameters listed in Condition 29, Tables 1 and 2;
- b. CMS performance reports as required by Condition 30;

- c. Results of HAP reduction performance tests required by Conditions 31 and 32a;
- d. Corrective actions taken as a result of any excursion as required by Condition 32b;
- e. Notifications required by Condition 32d; and
- f. Quarterly performance reports required by Condition 34.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and 9 VAC 5-50-50)

Phase 2 NRT Project Equipment Requirements - (emission unit ID#s 112 through 119)

- 36. NRT Project Equipment Requirements – Limitations - Throughput** - The throughput of wastewater from AdvanSix Resins and Chemicals LLC (AdvanSix) to the units associated with the Phase 2 NRT Project (based on an annual average) shall not exceed 6.5 million gallons a day (MGD), calculated monthly as the average of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by calculating the average wastewater flow for the most recent calendar month and then averaging the most recent month's average wastewater flow with the preceding 11 months' average wastewater flows.

(9 VAC and Condition 2 of the 02/24/15 NSR Permit)

- 37. NRT Project Equipment Requirements – Limitations - Process Emission Limits** - Emissions from the operation of the equipment associated with the Phase 2 Nutrient Removal Technology (NRT) Project shall not exceed the limits specified below:

Volatile Organic Compounds	155.24 lbs/day	28.3 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 36, 38, 39, and 40.

(9 VAC 5-80-110 and Condition 3 of the 2/24/15 NSR Permit)

- 38. NRT Project Equipment Requirements – Monitoring** – The permittee shall monitor and record the daily influent volume (in units of MGD) of segregated wastewater discharged from AdvanSix.

(9 VAC 5-80-110)

- 39. NRT Project Equipment Requirements – Monitoring** – Modeling of the wastewater influent from AdvanSix using Toxchem or an equivalent model as approved by DEQ shall be performed annually on a calendar year basis.

(9 VAC 5-80-110)

40. NRT Project Equipment Requirements – Recordkeeping - On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual average daily throughput (in units of MGD) of Honeywell (AdvanSix)'s wastewater to the units associated with the Phase 2 NRT Project, calculated monthly as the average of each consecutive 12-month period (as stated in Condition 36).
- b. Toxchem Model results or the results from an equivalent model as approved by DEQ. These records shall include at minimum the input data and resulting VOC and HAP emissions.
- c. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 4 of the 2/24/15 NSR Permit)

Engines – KOHLER 300 RE0ZV Emergency Diesel Engine Requirements (emission unit ID #22)

41. Engine Requirements- Kohler 300 Emergency Diesel Engine (emission unit ID #22) – Limitations, Monitoring and Recordkeeping – The Kohler 300 Emergency Diesel Engine is subject to 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous air Pollutants for Stationary Reciprocating Internal Combustion Engines:

Citation	Requirement
40 CFR 63.6602 and Table 2c to Subpart ZZZZ of Part 63	Emission limitations and other requirements
40 CFR 63.6605(a) and (b), 40 CFR 63.6640, and Tables 2c and 6 to Subpart ZZZZ of Part 63	Continuous compliance requirements
40 CFR 63.6625 (e), (f), (h), and (i), and Table 2c to Subpart ZZZZ of Part 63	Monitoring, installation, operation and maintenance requirements
40 CFR 63.6655(d), (e), and (f), and 63.6660	Recordkeeping requirements
Table 8 to Subpart ZZZZ	Applicability of General Provisions to Subpart ZZZZ

This unit is regulated under these provisions as an existing, emergency stationary RICE located at a major source of HAP emissions. In order to be considered an emergency stationary RICE, the unit must be operated in accordance with 40 CFR 63.6640(f). (9 VAC 5-80-110 and 40 CFR 63, Subpart ZZZZ)

42. **Engine Requirements – Kohler 300 Emergency Diesel Engine (emission unit ID #22) - Limitations** – Visible emissions from the stack for emission unit ID #22 shall not exceed 20 percent opacity except for one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9 VAC 5-80-110 and 9 VAC 5-50-80)
43. **Engine Requirements – Kohler 300 Emergency Diesel Engine - (emission unit ID #22) – Monitoring/Recordkeeping** – The permittee shall perform monthly checks for any visible emissions during the operation of the Kohler 300 Emergency Diesel Engine during periods when the unit is operated for emergency purposes or for routine testing for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed, the permittee shall take timely corrective action such that the Kohler 300 Emergency Diesel Engine resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the fire pump engine does not exceed 20% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the Kohler 300 Emergency Diesel Engine resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE records and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the Kohler 300 Emergency Diesel Engine to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office.
(9 VAC 5-80-110 and 9 VAC 5-50-50)
44. **Engine Requirements – Kohler 300 Emergency Diesel Engine (emission unit ID #22) - Recordkeeping** – The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- a. Annual hours of operation of the Kohler 300 Emergency Diesel Engine, calculated monthly as the sum of each consecutive 12-month period.
 - b. Maintenance conducted on the emergency engine which demonstrates that the engine is being operated and maintained according to the manufacturer's emission related written instructions.

- c. A log of actions taken during periods of malfunction to minimize emissions, including the duration of each malfunction and the corrective actions taken to minimize emissions and restore the malfunctioning engine.
- d. The results of the visible emission observations, visible emissions evaluations, and details of any corrective action taken as a result of these inspections.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110)

Engines – Caterpillar C15 Emergency Diesel Engine Requirements (emission unit ID #23)

45. **Engine Requirements – Caterpillar C15 Emergency Diesel Engine (Emission Unit ID #23) – Limitations - RICE MACT Requirements** – For the 500 kW Caterpillar C15 Emergency Diesel Engine, the permittee shall comply with 40 CFR 63, Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60, Subpart IIII. No other requirements of this section apply.

(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.6590(c))

46. **Engine Requirements – Caterpillar C15 Emergency Diesel Engine (Emission Unit ID #23) – Limitations - NSPS Requirements** – The Caterpillar C15 Diesel Engine is subject to NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines:

Citation	Requirement
40 CFR 60.4205(b) and 60.4202(a)(2)	Emission standards
40 CFR 60.4206 and 60.4211(a), (c), (f), and (g)(2)	Compliance requirements
40 CFR 60.4207(b)	Fuel requirements
40 CFR 60.4208(a) and (h)	Installing requirements
40 CFR 60.4209(a)	Monitoring requirements
40 CFR 60.4212	Testing requirements
40 CFR 60.4218 and Table 8 to Subpart IIII	Applicability of General Provisions to Subpart IIII

(9 VAC 5-80-110 and 40 CFR 60 Subpart IIII)

47. **Engine Requirements – Caterpillar C15 Emergency Diesel Engine (Emission Unit ID #23) – Limitations - Visible Emissions** – Visible emissions from the Caterpillar Diesel Engine shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity.

(9 VAC 5-80-110 and 9 VAC 5-50-80)

48. **Engine Requirements – Caterpillar C15 Emergency Diesel Engine (Emission Unit ID #23)- Monitoring** – The permittee shall perform monthly checks for any visible emissions during the operation of the Caterpillar C15 Emergency Diesel Engine during periods when the unit is operated for emergency purposes or for routine testing for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed, the permittee shall take timely corrective action such that the Caterpillar C15 Emergency Diesel Engine resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A Method 9 to assure that the Caterpillar C15 Emergency Diesel Engine does not exceed 20% opacity. The VEE shall be conducted for a minimum period of six minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the Caterpillar C15 Emergency Diesel Engine resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the Caterpillar C15 Emergency Diesel Engine to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office (9 VAC 5-80-110 and 9 VAC 5-50-50)

49. **Engine Requirements – Caterpillar C15 Emergency Diesel Engine (Emission Unit ID #23) – Recordkeeping** – The facility shall maintain records documenting conformance with applicable operating limitations, work practice, and management practice standards found in the New Source Performance Standards (NSPS) 40 CFR 60 Subpart IIII for Compression Ignition Stationary Engines. These records shall include but are not limited to:

- a. Annual hours of operation of the emergency engine, including hours spent for non-emergency operation, calculated as the sum of each consecutive 12-month period.
- b. Maintenance conducted on the emergency engine which demonstrates that the engine is being operated and maintained according to the manufacturer's emission related written instructions.
- c. A log of actions taken during periods of malfunction to minimize emissions, including the duration of each malfunction and the corrective actions taken to minimize emissions and restore the malfunctioning engine.
- d. The results of the visible emission observations, visible emissions evaluations, and details of any corrective action taken as a result of these inspections.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-110)

Facility Wide Conditions

50. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)
51. **Facility Wide Conditions - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-110)

Insignificant Emission Units

52. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Pollutant(s) Emitted (9 VAC 5-80-720B)
1	Influent (Bar) Screens	VOC < 5 tons/yr
8	Gravity Thickeners	
9	Dissolved Air Flotation Thickeners	
10	Supernatant Return Wetwell	
14	Solids Handling Building	PM/PM ₁₀ < 5 tons/yr
16	Re-aeration unit	VOC < 5 tons/yr
18	Holding Tanks	
19	Foreign Sludge Hopper	
100	Influent (Bar) Screen Conveyor and Storage Bin	PM/PM ₁₀ < 5 tons/yr
101	Grit Handling System	
103	Sludge Cake Storage Pad	
104	Degreasing Unit	VOC < 5 tons/yr
105	Primary Sludge Pump Station Vault Vent	
106	Gravity Thickener Basement Vent	
107	Dissolved Air Flotation Thickener Louver Vent	
109	Non-Potable Water Wet Well	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. (9 VAC 5-80-110)

Permit Shield & Inapplicable Requirements

53. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-110 and 9 VAC 5-80-140)

General Conditions

54. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110)

55. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

56. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
57. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
58. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
59. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
60. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)
61. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;

- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110)

62. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110)

63. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
- c. Exceedance of emissions limitations or operational restrictions;
- d. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
- e. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110)

64. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional

requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110)

65. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 63 of this permit. (9 VAC 5-80-110 F.2)
66. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the

Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office.
(9 VAC 5-80-110 and 9 VAC 5-20-180)

67. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.
(9 VAC 5-20-180 C and 9 VAC 5-50-50)

68. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board semiannually. All semi-annual reports shall be postmarked by the 30th day following the end of each calendar semi-annual period (June 30th and January 30th). All reports shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.
(9 VAC 5-80-110, 9 VAC 5-20-180 C and 9 VAC 5-50-50)

69. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance,

such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110)

70. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110)
71. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110)
72. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-110, 9 VAC 5-80-190 and 9 VAC 5-80-260)
73. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110)
74. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110)
75. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110)
76. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310

through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index. (9 VAC 5-80-110, 9 VAC 5-80-340 and 9 VAC 5-80-2340)

77. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-80-110 and 9 VAC 5-50-90)

78. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-80-110 and 9 VAC 5-50-20)

79. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110)

80. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110)

81. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110)

- 82. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-110 and 9 VAC 5-80-150)
- 83. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-110 and 9 VAC 5-80-160)
- 84. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-110 and 9 VAC 5-80-160)
- 85. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-110 and 9 VAC 5-80-160)
- 86. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-110, 9 VAC 5-80-190 C and 9 VAC 5-80-260)
- 87. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-110 and 9 VAC 5-80-80 E)

88. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9 VAC 5-80-110 and 40 CFR Part 82)
89. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110)
90. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9 VAC 5-80-110 and 40 CFR Part 68)
91. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110)
92. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC5-80-50 through 9 VAC5-80-300.
- (9 VAC 5-80-110)

